



PT22

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/237,981C

DATE: 12/04/2002

TIME: 11:17:37

Input Set : A:\EP.txt

Output Set: N:\CRF4\12032002\I237981C.raw

3 <110> APPLICANT: Quertermous, Thomas
 4 Hogan, Brigid
 5 Snodgrass, Ralph H
 6 Zupancic, Thomas J
 8 <120> TITLE OF INVENTION: Antibodies Binding to Polypeptides Encoded by
 Developmentally-Regulated

9 Endothelial Cell Locus-1

11 <130> FILE REFERENCE: 54964.8002.US00 (238/300)

13 <140> CURRENT APPLICATION NUMBER: US 09/237,981C

14 <141> CURRENT FILING DATE: 1999-01-25

16 <150> PRIOR APPLICATION NUMBER: US 08/659,235

17 <151> PRIOR FILING DATE: 1996-06-05

19 <150> PRIOR APPLICATION NUMBER: US 08/480,229

20 <151> PRIOR FILING DATE: 1995-06-07

22 <160> NUMBER OF SEQ ID NOS: 31

24 <170> SOFTWARE: PatentIn version 3.1

26 <210> SEQ ID NO: 1

27 <211> LENGTH: 81

28 <212> TYPE: PRT

29 <213> ORGANISM: mouse

31 <400> SEQUENCE: 1

33 Asp Leu Leu Val Pro Thr Lys Val Thr Gly Ile Ile Thr Gln Gly Ala

34 1 5 10 15

37 Lys Asp Phe Gly Asp Val Leu Phe Val Gly Ser Tyr Lys Leu Ala Tyr

38 20 25 30

41 Ser Asn Asp Gly Glu His Trp Met Val His Gln Asp Glu Lys Gln Arg

42 35 40 45

45 Lys Asp Lys Val Phe Gln Gly Asn Phe Asp Asn Asp Thr His Arg Lys

46 50 55 60

49 Asn Val Ile Asp Pro Pro Ile Tyr Ala Arg Phe Ile Arg Ile Leu Pro

50 65 70 75 80

53 Leu

57 <210> SEQ ID NO: 2

58 <211> LENGTH: 81

59 <212> TYPE: PRT

60 <213> ORGANISM: Homo sapiens

62 <400> SEQUENCE: 2

64 Asp Leu Gly Ser Ser Lys Glu Val Thr Gly Ile Ile Thr Gln Gly Ala

65 1 5 10 15

68 Arg Asn Phe Gly Ser Val Gln Phe Val Ala Ser Tyr Lys Val Ala Tyr

69 20 25 30

72 Ser Asn Asp Ser Ala Asn Trp Thr Glu Tyr Gln Asp Pro Arg Thr Gly

73 35 40 45

76 Ser Ser Lys Val Phe Gln Gly Asn Leu Asp Asn Asn Ser His Lys Lys

ENTERED

RAW SEQUENCE LISTING

DATE: 12/04/2002

PATENT APPLICATION: US/09/237,981C

TIME: 11:17:37

Input Set : A:\EP.txt

Output Set: N:\CRF4\12032002\I237981C.raw

```

77      50      55      60
80 Asn Ile Phe Glu Lys Pro Phe Met Ala Arg Tyr Val Arg Val Leu Pro
81 65      70      75      80
84 Val
88 <210> SEQ ID NO: 3
89 <211> LENGTH: 81
90 <212> TYPE: PRT
91 <213> ORGANISM: Homo sapiens
93 <400> SEQUENCE: 3
95 Asp Leu Leu Lys Ile Lys Lys Ile Thr Ala Ile Ile Thr Gln Gly Cys
96 1      5      10      15
99 Lys Ser Leu Ser Ser Glu Met Tyr Val Lys Ser Tyr Thr Ile His Tyr
100      20      25      30
103 Ser Glu Gln Gly Val Glu Trp Lys Pro Tyr Arg Leu Lys Ser Ser Met
104      35      40      45
107 Val Asp Lys Ile Phe Glu Gly Asn Thr Asn Thr Lys Gly His Val Lys
108      50      55      60
111 Asn Phe Phe Asn Pro Pro Ile Ile Ser Arg Phe Ile Arg Val Ile Pro
112 65      70      75      80
115 Lys
119 <210> SEQ ID NO: 4
120 <211> LENGTH: 72
121 <212> TYPE: PRT
122 <213> ORGANISM: mouse
124 <400> SEQUENCE: 4
126 Asp Leu Gln Lys Thr Met Lys Val Thr Gly Ile Ile Thr Gln Gly Val
127 1      5      10      15
130 Lys Ser Leu Phe Thr Ser Met Phe Val Lys Glu Phe Leu Ile Ser Ser
131      20      25      30
134 Ser Gln Asp Gly His His Trp Thr Gln Ile Leu Tyr Asn Gly Lys Val
135      35      40      45
138 Lys Val Phe Gln Gly Asn Gln Asp Ser Ser Thr Pro Met Met Asn Ser
139      50      55      60
142 Leu Asp Pro Pro Leu Leu Thr Arg
143 65      70
146 <210> SEQ ID NO: 5
147 <211> LENGTH: 83
148 <212> TYPE: PRT
149 <213> ORGANISM: Xenopus
151 <400> SEQUENCE: 5
153 Asp Leu Glu Asn Leu Arg Phe Val Ser Gly Ile Gly Thr Gln Gly Ala
154 1      5      10      15
157 Ile Ser Lys Glu Thr Lys Lys Lys Tyr Phe Val Lys Ser Tyr Lys Val
158      20      25      30
161 Asp Ile Ser Ser Asn Gly Glu Asp Trp Ile Thr Leu Lys Gly Asp Asn
162      35      40      45
165 Lys His Leu Val Phe Thr Gly Asn Thr Asp Ala Thr Asp Val Val Tyr
166      50      55      60
169 Arg Pro Phe Ser Lys Pro Val Ile Thr Arg Phe Val Arg Leu Arg Pro

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/237,981C

DATE: 12/04/2002

TIME: 11:17:37

Input Set : A:\EP.txt

Output Set: N:\CRF4\12032002\I237981C.raw

```

170 65                               70                               75                               80
173 Val Thr Trp
177 <210> SEQ ID NO: 6
178 <211> LENGTH: 79
179 <212> TYPE: PRT
180 <213> ORGANISM: Xenopus
182 <400> SEQUENCE: 6
184 Asp Leu Ala Glu Glu Lys Ile Val Arg Gly Val Ile Ile Gln Gly Gly
185 1                               5                               10                               15
188 Lys His Lys Glu Asn Lys Val Phe Met Arg Lys Phe Lys Ile Gly Tyr
189                               20                               25                               30
192 Ser Asn Asn Gly Thr Glu Trp Gly Met Ile Met Asp Ser Ser Lys Asn
193                               35                               40                               45
196 Lys Pro Lys Thr Phe Glu Gly Asn Thr Asn Tyr Asp Thr Pro Glu Leu
197                               50                               55                               60
200 Arg Thr Phe Ala His Ile Thr Thr Gly Phe Ile Arg Ile Ile Pro
201 65                               70                               75
204 <210> SEQ ID NO: 7
205 <211> LENGTH: 75
206 <212> TYPE: PRT
207 <213> ORGANISM: Homo sapiens
209 <400> SEQUENCE: 7
211 Gly Cys Glu Val Pro Arg Thr Phe Met Cys Val Ala Leu Gln Gly Arg
212 1                               5                               10                               15
215 Gly Asp Ala Asp Gln Trp Val Thr Ser Tyr Lys Ile Arg Tyr Ser Leu
216                               20                               25                               30
219 Asp Asn Val Ser Trp Phe Glu Tyr Arg Asp Gly Ala Ala Ile Thr Gly
220                               35                               40                               45
223 Val Thr Asp Arg Asn Thr Val Val Asn His Phe Phe Asp Thr Pro Ile
224                               50                               55                               60
227 Arg Ala Arg Ser Ile Ala Ile His Pro Leu Thr
228 65                               70                               75
231 <210> SEQ ID NO: 8
232 <211> LENGTH: 85
233 <212> TYPE: PRT
234 <213> ORGANISM: Artificial sequence
236 <220> FEATURE:
237 <223> OTHER INFORMATION: consensus sequence of SEQ.ID.NOS.1-7
239 <220> FEATURE:
240 <221> NAME/KEY: MISC_FEATURE
241 <222> LOCATION: (3)..(7)
242 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
245 <220> FEATURE:
246 <221> NAME/KEY: MISC_FEATURE
247 <222> LOCATION: (16)..(18)
248 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
251 <220> FEATURE:
252 <221> NAME/KEY: MISC_FEATURE
253 <222> LOCATION: (20)..(25)

```

RAW SEQUENCE LISTING

DATE: 12/04/2002

PATENT APPLICATION: US/09/237,981C

TIME: 11:17:37

Input Set : A:\EP.txt

Output Set: N:\CRF4\12032002\I237981C.raw

254 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
257 <220> FEATURE:
258 <221> NAME/KEY: MISC_FEATURE
259 <222> LOCATION: (28)..(28)
260 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
263 <220> FEATURE:
264 <221> NAME/KEY: MISC_FEATURE
265 <222> LOCATION: (33)..(33)
266 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
269 <220> FEATURE:
270 <221> NAME/KEY: MISC_FEATURE
271 <222> LOCATION: (36)..(36)
272 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
275 <220> FEATURE:
276 <221> NAME/KEY: MISC_FEATURE
277 <222> LOCATION: (39)..(40)
278 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
281 <220> FEATURE:
282 <221> NAME/KEY: MISC_FEATURE
283 <222> LOCATION: (42)..(50)
284 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
287 <220> FEATURE:
288 <221> NAME/KEY: MISC_FEATURE
289 <222> LOCATION: (52)..(52)
290 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
293 <220> FEATURE:
294 <221> NAME/KEY: MISC_FEATURE
295 <222> LOCATION: (56)..(56)
296 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
299 <220> FEATURE:
300 <221> NAME/KEY: MISC_FEATURE
301 <222> LOCATION: (61)..(62)
302 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
305 <220> FEATURE:
306 <221> NAME/KEY: MISC_FEATURE
307 <222> LOCATION: (64)..(66)
308 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
311 <220> FEATURE:
312 <221> NAME/KEY: MISC_FEATURE
313 <222> LOCATION: (68)..(68)
314 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
317 <220> FEATURE:
318 <221> NAME/KEY: MISC_FEATURE
319 <222> LOCATION: (70)..(71)
320 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
323 <220> FEATURE:
324 <221> NAME/KEY: MISC_FEATURE
325 <222> LOCATION: (74)..(75)
326 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/237,981C

DATE: 12/04/2002

TIME: 11:17:37

Input Set : A:\EP.txt

Output Set: N:\CRF4\12032002\I237981C.raw

```

329 <220> FEATURE:
330 <221> NAME/KEY: MISC_FEATURE
331 <222> LOCATION: (80)..(85)
332 <223> OTHER INFORMATION: nonconsensus sequence of SEQ.ID.NOS.1-7
335 <400> SEQUENCE: 8
W--> 337 Asp Leu Xaa Xaa Xaa Xaa Xaa Val Thr Gly Ile Ile Thr Gln Gly Xaa
338 1 5 10 15
W--> 341 Xaa Xaa Lys Xaa Xaa Xaa Xaa Xaa Xaa Phe Val Xaa Ser Tyr Lys Ile
342 20 25 30
W--> 345 Xaa Tyr Ser Xaa Asp Gly Xaa Xaa Trp Xaa Xaa Xaa Xaa Xaa Xaa Xaa
346 35 40 45
W--> 349 Xaa Xaa Lys Xaa Lys Val Phe Xaa Gly Asn Thr Asp Xaa Xaa Thr Xaa
350 50 55 60
W--> 353 Xaa Xaa Asn Xaa Phe Xaa Xaa Pro Ile Xaa Xaa Arg Phe Ile Arg Xaa
354 65 70 75 80
W--> 357 Xaa Pro Xaa Xaa Xaa
358 85
361 <210> SEQ ID NO: 9
362 <211> LENGTH: 2303
363 <212> TYPE: DNA
364 <213> ORGANISM: mouse
366 <220> FEATURE:
367 <221> NAME/KEY: CDS
368 <222> LOCATION: (619)..(2058)
369 <223> OTHER INFORMATION:
W--> 371 <400> 9
372 gaattccggt taactgagga caaagggttaa tgcagaagtg atattttgatt tccattctca 60
374 ttcccagtggt ccttgatatt taaactgatt cctgccacca ggtccttggg ccaccctgtc 120
376 cctgcgtctc atattttctgc atgctgcttt gtttgatat agtgcgctcc tggcctcagg 180
378 ctcgctcccc tccagctctc gcttcattgt tctccaagtc agaagcccc gcacccgccg 240
380 cgcagcagcg tgagccgtag tcaactgctgg ccgcttcgcc tgcgtgcgcg cacggaaatc 300
382 ggggagccag gaacccaagg agccgccgtc cgcccgcgtg gcctctgcta gaccactcgc 360
384 agccccagcc tctctcaagc gcaccacct ccgcgcaccc cagctcaggc gaagctggag 420
386 tgaggggtgaa tcaccctttc tctagggcca ccactctttt atcgcccttc ccaagatttg 480
388 agaagcgctg cgggaggaaa gacgtcctct tgatctctga cagggcgggg tttactgctg 540
390 tcctgcaggc gcgcctcgcc tactgtgccc tccgctacga ccccggaacca gccaggtca 600
392 cgtccgtgag aagggatc atg aag cac ttg gta gca gcc tgg ctt ttg gtt 651
393 Met Lys His Leu Val Ala Ala Trp Leu Leu Val
394 1 5 10
396 gga ctc agc ctc ggg gtg ccc cag ttc ggc aaa ggt gac att tgc aac 699
397 Gly Leu Ser Leu Gly Val Pro Gln Phe Gly Lys Gly Asp Ile Cys Asn
398 15 20 25
400 ccg aac ccc tgt gaa aat ggt ggc atc tgt ctg tca gga ctg gct gat 747
401 Pro Asn Pro Cys Glu Asn Gly Gly Ile Cys Leu Ser Gly Leu Ala Asp
402 30 35 40
404 gat tcc ttt tcc tgt gag tgt cca gaa ggc ttc gca ggt ccg aac tgc 795
405 Asp Ser Phe Ser Cys Glu Cys Pro Glu Gly Phe Ala Gly Pro Asn Cys
406 45 50 55
408 tct agt gtt gtg gag gtt gca tca gat gaa gaa aag cct act tca gca 843

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/237,981C

DATE: 12/04/2002
TIME: 11:17:38

Input Set : A:\EP.txt
Output Set: N:\CRF4\12032002\I237981C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:8; Xaa Pos. 3,4,5,6,7,16,17,18,20,21,22,23,24,25,28,33,36,39,40,42,43
Seq#:8; Xaa Pos. 44,45,46,47,48,49,50,52,56,61,62,64,65,66,68,70,71,74,75
Seq#:8; Xaa Pos. 80,81,83,84,85
Seq#:21; Xaa Pos. 225,243,266,277
Seq#:26; Xaa Pos. 2,3,4,7,11,13,14,15,16,17,18,19,20,21,22,23,24,25,27,29
Seq#:26; Xaa Pos. 31,32,35,37,38,40
Seq#:27; N Pos. 1
Seq#:28; N Pos. 1819,1820,1821
Seq#:31; Xaa Pos. 1

VERIFICATION SUMMARY

DATE: 12/04/2002

PATENT APPLICATION: US/09/237,981C

TIME: 11:17:38

Input Set : A:\EP.txt

Output Set: N:\CRF4\12032002\I237981C.raw

L:337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:16
L:345 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:32
L:349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:48
L:353 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:64
L:357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:80
L:371 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:369
L:1121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:224
L:1125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:240
L:1129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:256
L:1133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:272
L:1295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:1299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:16
L:1303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:32
L:1319 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:1348 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:28,Line#:1340
L:1443 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:1812
L:1669 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0